

A.D. 1879, 14th MARCH. Nº 1025.

Manufacture of Beer.

LETTERS PATENT to Frank Wirth, of the Firm of Wirth and Company, Patent Solicitors, at Frankfort on the Main, in the Empire of Germany, for the Invention of "Improvements in the Manufacture of Beer." A communication from George Charles Holderer, Master Brewer, of Namur, in the Kingdom of Belgium.

Sealed the 2nd September 1879, and dated the 14th March 1879.

PROVISIONAL SPECIFICATION left by the said Frank Wirth at the Office of the Commissioners of Patents on the 14th March 1879.

FRANK WIRTH, of the Firm of Wirth and Company, Patent Solicitors, at Frankfort on the Main, in the Empire of Germany. ["IMPROVEMENTS IN THE 5 MANUFACTURE OF BEER." [A communication from George Charles Holderer, Master Brewer, of Namur, in the Kingdom of Belgium.]

This Invention relates to improvements in the manufacture of beer, and effects a more rapid manufacture than has been heretofore effected of beer which is intended to be perfectly clear and effervescent at a low temperature. By means of the said 10 Invention the manufacture of what is known as Vienna beer and the better class of beer in general is improved.

The said Invention is carried into practice as follows, that is to say:—The first and second fermentation are effected at as high a temperature as possible, according to the taste of the public (from 5° centigrade to 20° centigrade).

If the practical experiences of modern science are worked upon, a clear and good tasting beer is obtained in a short time. It is well known that the maturing of beer stands in reversed position when compared with the temperature, as the higher the latter the sooner the beer is matured.

When the beer has lost its new taste it is cooled down to 32° Fahrenheit and 20 charged with carbonic acid gas by any of the well known methods. If it should be required to produce beer but little attenuated I add some beer in the first stage of fermentation. By the process of cooling, particles of albumen are separated, which make the beer thick, and they have to be separated. The most simple method of doing this is by clearing or clarifying; but as all beer cannot be manipulated with

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Wirth's Improvements in the Manufacture of Beer.

isinglass in the same manner, it is best to experiment on a small quantity in a small bottle.

It will be seen that my method is not a clearing or clarifying of new beer, nor a mixing of new and old beer as is effected in the United States, nor a clearing of faulty beer or beer that has become accidentally thick, neither is the said method 5 "thrushing" as effected in Bohemia, where the beer is kept from 8 to 14 days in small barrels in the fermenting cellar before being placed in the store cellars.

By my method I keep the beer at as high a temperature as possible in order to mature the same as quickly as possible and only keep it at freezing point long enough 10 to charge it with carbonic acid and effect the clearing.

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Wirth's Improvements in the Manufacture of Beer.

SPECIFICATION in pursuance of the conditions of the Letters Patent filed by the said Frank Wirth in the Great Seal Patent Office on the 5th September 1879.

FRANK WIRTH, of the Firm of Wirth and Company, Patent Solicitors, at 5 Frankfort-on-the-Main, in the Empire of Germany. "IMPROVEMENTS IN THE MANUFACTURE OF BEER." A communication from George Charles Holderer, Master Brewer, of Namur, in the Kingdom of Belgium.

This Invention relates to improvements in the manufacture of beer and effects a more rapid manufacture than has been heretofore effected of beer which is intended 10 to be perfectly clear and effervescent at a low temperature. By means of the said Invention the manufacture of what is known as Vienna beer and the better classes of beer in general is improved and the production of limpid ale at a low temperature is obtained.

This Invention is based on a better knowledge of the albuminous matters which 15 render the beer feculent or thick at a low temperature, this effect having heretofore been attributed to the presence of gluten in the beer, and I have succeeded in taking

off those matters in a sure and certain manner.

The said Invention is carried into practice as follows, that is to say:—The first and second fermentations are effected at as high a temperature as possible, according to the taste of the public from 41° Fahrenheit to 68° Fahrenheit (from 5° centigrade to 20° centigrade).

If the practical experiences of modern science are worked upon a clear and good tasting beer is obtained in a short time. It is well known that the maturing of beer stands in reversed position when compared with the temperature, as the higher the

25 temperature the sooner the beer is matured.

When the beer has lost its new taste it is cooled down to 32° Fahrenheit, and charged with carbonic acid gas by any of the well known methods. If it should be required to produce beer but little attenuated I add some beer in the first stage of fermentation. By the process of cooling, particles of albumen are separated, which make the beer thick and have to be removed. The most simple method of doing this is by clearing or clarifying; but as all beer cannot be manipulated with isinglass in the same manner, it is best to experiment on a small quantity in a bottle.

It will be seen that my method is not a clearing or clarifying of new beer, 35 nor a mixing of new and old beer as is effected in the United States, nor a clearing of faulty beer or beer that has become accidentally thick, neither is the said method "thrushing" as effected in Bohemia, where the beer is kept from 8 to 14 days in small barrels in the fermenting cellar before being placed in the store cellars.

0 Having thus fully described the said Invention and the manner of performing the

same, I wish it understood that I claim,-

The method, as described, of keeping the beer at as high a temperature as possible in order to mature the same as quickly as possible, and only keeping it at freezing point long enough to charge the same with carbonic acid and effect the clearing, in the manner and for the purpose set forth.

In witness whereof, I, the said Frank Wirth, have hereunto set my hand and seal, this Twenty fifth day of August, in the year of our Lord One thousand eight hundred and seventy nine.

FRANK WIRTH, (LS.)